Title (en)

IMPROVING UNSUPERVISED EMBEDDING METHODS FOR SIMILARITY BASED INDUSTRIAL COMPONENT MODEL REQUESTING SYSTEMS

Title (de)

VERBESSERUNG VON UNÜBERWACHTEN EINBETTUNGSVERFAHREN FÜR SYSTEM ZUR ANFRAGE VON AUF ÄHNLICHKEIT BASIERENDEN MODELLEN INDUSTRIELLER KOMPONENTEN

Title (fr)

AMÉLIORATION DE PROCÉDÉS D'INTÉGRATION NON SUPERVISÉES POUR DES SYSTÈMES INDUSTRIELS DE REQUÊTE DE MODÈLE DE COMPOSANTS INDUSTRIELS BASÉS SUR LA SIMILARITÉ

Publication

EP 3989101 A1 20220427 (EN)

Application

EP 20306250 A 20201020

Priority

EP 20306250 A 20201020

Abstract (en)

computer implemented method for comparing unsupervised embedding methods for a similarity based industrial component model requesting system, comprising:a) providing a text corpus (200) relating to industrial component models and a list of testing words,b) modifying the text corpus (220) by altering some of the occurrences of each testing word of the list of testing words, the modified text corpus thus containing, for each testing word, occurrences of a first version of each testing word, and occurrences of a second version of each testing word,c) running an unsupervised embedding method (260) on the modified text corpus and obtaining vector representations of the words of the modified text corpus;d) determining a scoring value (270) associated with the unsupervised embedding method, by comparing, for at least some of the testing words, the vector representations of the first version of these testing words, and the vector representations the second version of these testing words;e) running steps b) to d) with the text corpus and the list of testing words of step a) with another unsupervised embedding method and returning the respective scoring values.

IPC 8 full level

G06F 40/30 (2020.01); **G06F 40/247** (2020.01)

CPC (source: CN EP US)

G06F 30/20 (2020.01 - CN); **G06F 40/166** (2020.01 - US); **G06F 40/247** (2020.01 - CN EP); **G06F 40/279** (2020.01 - US); **G06F 40/284** (2020.01 - CN); **G06F 40/30** (2020.01 - EP)

Citation (applicant)

KAZDHAN ET AL.: "Harmonic 3D shape matching", SIGGRAPH SKETCHES AND APPLICATIONS, 2002

Citation (search report)

- [I] WO 2018213205 A1 20181122 - DIGITAL REASONING SYSTEMS INC [US], et al
- [A] US 2018285344 A1 20181004 - HE RUIDAN [SG], et al
- [A] OPUCHLICH PAUL: "Comparing unsupervised word embedding Models to build a large scale Text Recommendation System", 14 October 2019 (2019-10-14), pages 1 - 39, XP055790140, Retrieved from the Internet <URL:https://www.researchgate.net/profile/Paul-Opuchlich/publication/340492012_Comparing_unsupervised_word_embedding_Models_to_build_a_large_scale_Text_Recommendation_System/links/5e8cd31aa6fdcca789fdd94e/Comparing-unsupervised-word-embedding-Models-to-build-a-large-scale-Text-Recommendation-System.pdf> [retrieved on 20210325]
- [AD] MICHAEL KAZHDAN ET AL: "Harmonic 3D shape matching", INTERNATIONAL CONFERENCE ON COMPUTER GRAPHICS AND INTERACTIVE TECHNIQUES ACM SIGGRAPH 2002; JULY 21 - 26, 2002, SAN ANTONIO, TEXAS, USA, ACM NEW YORK, 2 PENN PLAZA, SUITE 701 NEW YORK NY 10121-0701 USA, 21 July 2002 (2002-07-21), pages 191, XP058143502, ISBN: 978-1-58113-525-1, DOI: 10.1145/1242073.1242204
- [A] BOGUMIL KAMINSKI ET AL: "An Unsupervised Framework for Comparing Graph Embeddings", ARXIV.ORG, CORNELL UNIVERSITY LIBRARY, 201 OLIN LIBRARY CORNELL UNIVERSITY ITHACA, NY 14853, 29 May 2019 (2019-05-29), XP081879296, DOI: 10.1093/COMNET/CNZ043
- [A] SCHNABEL TOBIAS ET AL: "Evaluation methods for unsupervised word embeddings", PROCEEDINGS OF THE 2015 CONFERENCE ON EMPIRICAL METHODS IN NATURAL LANGUAGE PROCESSING, 1 January 2015 (2015-01-01), Stroudsburg, PA, USA, pages 298 - 307, XP055790294, Retrieved from the Internet <URL:https://www.aclweb.org/anthology/D15-1036.pdf> [retrieved on 20210325], DOI: 10.18653/v1/D15-1036

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 3989101 A1 20220427; CN 114386214 A 20220422; JP 2022067648 A 20220506; US 2022121819 A1 20220421

DOCDB simple family (application)

EP 20306250 A 20201020; CN 202111224371 A 20211019; JP 2021170897 A 20211019; US 202117506475 A 20211020